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DAVIDSON, DAN				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/806,517

Applicant(s)

MILLER ET AL.

Examiner

DAN I. DAVIDSON

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SI/ICE)
- Paper No(s)/Mail Date 03222004
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The information disclosure statement filed March 22, 2004 has been received and has been considered and made of record.

Specification

2. The specification is objected to since it provides that the optical media image source can include a hard disk drive (paragraph 20). The Examiner does not understand how this is possible given that the hard disk drive is constructed with magnetic film.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 8, 10, and 29-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claims state that an optical media image (optical media content) is stored on a hard disk drive. This subject is not described in the specification as to enable one of ordinary skill in the art to use the invention since the specification does not explain how a hard disk drive constructed with magnetic film can be used to store an optical media image (optical media content).

Art Unit: 2627

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-2, 5-6, 8-9, 13-15, 22-25, 27, 29, 31, 33-35, and 37-39 are rejected under 35 U.S.C. 102(e) as being anticipated by Wilks et al (US 6,944,757 B2).

Re claims 1, 22-23, and 37-38; Wilks et al disclose loading an optical media image containing operating system code into random access memory (RAM), the optical media image being in an optical media format and representing optical media content from a physical optical media source (col. 9, lines 50-56; col. 9, lines 33-42; a CD media by definition contains an optical media image; a boot sector by definition contains operating system code); and accessing the optical media image in the optical media format via a RAM disk program stored in the RAM to emulate the optical media content on the physical optical media source to cause the computer to boot (col. 9, lines 57-59; since input/output is redirected from the CD media to the RAM disk, the RAM disk is acting as a virtual CD and thus is emulating the optical content of the CD; col. 8, lines 25-30). Wilks et al further disclose a computer program product encoding a

computer program for executing on a computer system the computer process described above (col. 7, lines 19-25).

Re claim 2; Wilks et al disclose that the loading operation comprises copying optical media content from the physical optical media source (col. 9, lines 50-52).

Re claims 5 and 25; Wilks et al disclose loading an image (boot) loader into RAM, the image loader retrieving optical media content from the physical optical media source (the image loader is a boot device driver program; col. 8, lines 25-30; col. 9, lines 50-52; note that the boot device driver program is part of the contents of the boot sector).

Re claim 6; Wilks et al disclose initializing the optical media image in RAM (col. 9, lines 57-62; this is accomplished through redirecting the boot device I/O to the RAM disk which is done by the boot device driver program copied to RAM along with all other contents of the boot sector).

Re claims 8 and 29; Wilks et al disclose copying the media image from a hard disk during a loading operation (col. 8, lines 63-65).

Re claims 9 and 27; Wilks et al disclose copying the optical media image from a compact disc (col. 9, lines 50-56).

Re claim 13; Wilks et al disclose an optical media file system driver to access a file structure in the optical media image by modifying the boot operating system and in particular the ARC name (col. 9, lines 57-65; the optical media file system driver is the boot device driver program).

Re claim 14; Wilks et al disclose that the accessing operation comprises redirecting an access to a location on the physical optical media source to a corresponding location in the optical media image (col. 9, line 59 – col. 10, line 7).

Re claim 15; Wilks et al disclose creating a disk partition containing the optical media image (col. 10, lines 2-4).

Re claim 24; Wilks et al disclose that the emulating operation comprises: receiving a request to access a file at a location on the physical optical media source; determining a location in the optical media image corresponding to the location of the file on the physical optical media source; and accessing the optical media image at the location in the optical media image (col. 9, lines 58 – col. 10, line 15).

Re claim 31; Wilks et al disclose an optical media image stored in RAM, the optical media image being in an optical media format, and including operating system code executable by a microprocessor (col. 9, lines 50-56; col. 9, lines 33-42); and a RAM disk program operable to access the optical media image according to the optical media format (col. 9, lines 57-59).

Re claims 33-34; Wilks et al disclose that the optical media image further includes an optical media file system that is managed by an optical media file system driver (col. 9, lines 59-65; see the rejection of claim 13 above).

Re claim 35; Wilks et al further disclose a boot loader operable to load the optical media image into RAM (column 9, lines 50-52; "boot device driver program").

Re claim 39; Wilks et al disclose an optical media file system driver operable to determine a memory location in the optical media image corresponding to a memory

location in the optical media content on the physical optical media content source; and a RAM disk program operable to access the memory location in the optical media image (col. 9, line 57 – col. 10, line 15; both the functions of the optical media file system driver and the RAM disk program are achieved by the boot device driver program).

7. Claims 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Ko et al (US 2002/0013882 A1).

Re claim 16; Ko et al disclose receiving a request for optical media content stored in an optical media format and containing operating system code for booting a computer; and in response to receiving the request, enabling the computer to download the optical media content (paragraph 17).

Re claim 17; Ko et al disclose identifying an operating system used by the computer based on information in the request (paragraph 17, “selection input”).

Re claim 18; Ko et al disclose enabling the computer to download an image loader operable to download the optical media content (paragraph 16, last 5 lines).

Re claim 19; Ko et al disclose retrieving the optical media content from a compact disk in response to receiving the request (paragraph 17; a compact disk is a subset of optical disks).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 3, 7, 26, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilks et al (US 6,944,757 B2) as applied to claims 1, 22, and 31 above, and further in view of Rothman et al (US 2004/0243385 A1).

Re claims 3 and 26; Wilks et al disclose the limitations at claims 1 and 22 as discussed above. Wilks et al do not disclose that the loading operation comprises requesting optical media content from a remote computer.

Rothman et al teach that optical media content can be loaded from a remote computer to RAM (paragraph 22, lines 5-9; paragraph 20, lines 1-3). Rothman et al further teach that loading optical media content from a remote computer is simply an alternative embodiment to loading the optical media content from an optical disk drive (i.e. the physical optical media source). Given that both Wilks et al and Rothman et al teach methods by which optical media content is loaded to RAM, it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to substitute the optical disk device internal to the computer as disclosed by Wilks et al with the optical disk device external to the computer (i.e. from a remote computer) as taught by Rothman et al to achieve the predictable result of loading the optical media content to the RAM.

Re claims 7 and 36; based on the rejection above of claim 3, downloading an image (boot) loader and an optical media image from a network boot server is not patentably distinct from downloading the above items from a physical optical media source that is part of the computer.

10. Claims 4 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilks et al (US 6,944,757 B2) as applied to claims 1 and 22 above, and further in view of Brundridge (US 6,279,109 B1).

Wilks et al disclose the limitations at claims 1 and 22 as discussed above.

Wilks et al fail to disclose decompressing the optical media image during loading. Brundridge teaches this limitation in the context of loading an optical media image containing operating system code into RAM (as in Wilks et al)(col. 13, lines 8-9). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to decompress the optical media image during loading as taught by Brundridge in Wilks et al, since decompression of the optical media image during loading in Wilks et al achieves the predictable result of reducing the size of the optical image file prior to the loading process.

11. Claims 11-12 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilks et al (US 6,944,757 B2).

Wilks et al disclose the limitations at claims 1 and 31 as discussed above.

Wilks et al fail to disclose the format in which the optical media content is formatted. Official Notice is taken that at the time of Applicant's invention, it was well known to one of ordinary skill in the art to use either a universal disk format or an ISO optical media format as the format in which the optical media content is formatted. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to use the above formats for the optical media content in Wilks et al for the predictable result of enabling detection of the optical media image.

12. Claims 10 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilks et al (US 6,944,757 B2) as applied to claims 1 and 22 above, and further in view of Wagner et al (US 2003/0197963 A1).

Wilks et al disclose the limitations at claims 1 and 22 as discussed above. Wilks et al further disclose copying the media content from a hard disk (col. 8, lines 63-65).

Wilks et al fail to disclose storing the media image on a hard disk prior to losing power to the RAM. Wagner et al teach storing bits in both RAM and on a dedicated portion of a hard disk in case of a power failure (paragraph 9). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to store data present in RAM also to a hard disk prior to losing power to the RAM as taught by Wagner et al in Wilks et al, since storing data present in RAM to a hard disk prior to losing power as taught in Wagner et al is in no way dependent on the use of the media image in Wilks et al, and storing data present in RAM to a hard disk prior to losing power as taught in Wagner et al could be used in combination with that disclosed by Wilks et al to achieve the predictable result of protecting the media image in Wilks et al from being lost due to a power failure.

13. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ko et al (US 2002/0013882 A1).

Ko et al disclose the limitations at claim 16 as discussed above.

Ko et al fails to disclose that the optical media content is stored in a universal disk format. Official Notice is taken that at the time of Applicant's invention, it was well known to one of ordinary skill in the art to use a universal disk format as the format in

which the optical media content is formatted. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to use the universal disk format for the optical media content in Ko et al for the predictable result of enabling detection of the optical media image.

14. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ko et al (US 2002/0013882 A1) as applied to claim 16 above, and further in view of Brundridge (US 6,279,109 B1).

Ko et al disclose the limitations at claim 16 as discussed above.

Ko et al fail to disclose compressing the optical media content. Brundridge teach this limitation in the context of optical media content containing operating system code loaded into RAM (as in Ko et al) (col. 13, lines 10-12). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to compress the optical media content as taught by Brundridge in Ko et al, since compression of the optical media content improves the process in Ko et al for the predictable result of reducing the size of the optical image content prior to booting the computer.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hensley (US 7,017,039 B2) teach running an operating system from a normally unsupported system device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAN I. DAVIDSON whose telephone number is (571) 272-7552. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea L. Wellington can be reached on (571) 272-4483. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. I. D./
Dan I Davidson
February 28, 2008

/Andrea L Wellington/

Supervisory Patent Examiner, Art Unit 2627

